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A review article on philosophy education as a stimuli for early brain development

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Abstract. The studies examining the relationship between brain development and desired skills in accordance with the needs emerging from the changing conditions of today have started to change. Although philosophy is a curriculum that becomes widespread with Children for Philosophy developed by Matthew Lipman in Turkey, it is not a curriculum that becomes widespread in preschool period, a period that brain development is on such important. In preschool period that is seen as the most important period in terms of brain development, it is required that children are given the education that will positively affect their neuroplasticity (the flexibility of brain neurons). When the importance of philosophy education programs in early years on children is considered, the importance of giving philosophy education as a thinking skills education program positively affecting children's thinking skills at first and their skills in all developmental areas in preschool period, becoming widespread these programs and increasing the resources for these programs emerges. Therefore, this study was a review article prepared by the aim of emphasizing the importance of philosophy education in preschool period as a stimuli for brain development, drawing attention to the importance of conducting these programs prevalently and systematically.

Keywords: Brain development, neuroplasticity, preschool period, philosophy education

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INTRODUCTION

Different changes and transformations were experienced in every epoch in historical context. Therefore, the skills expected from people in each epoch differed. Despite these differences, basic skills such as effective use of power of thinking, asking questions and investigating have never changed. During the ancient times, philosophers left behind great works on the importance of thinking and questioning and in this period when we are living the 21st century, thinking, using the power of thinking effectively and accurately, asking questions and questioning skills have become the focus of presenting a difference in many areas especially in the field of education.

As a result of the technological developments brought by 21st century, a need for people who may accurately analyze what they read, who may think strategically and who may renew themselves in line with the developments arose (Duman, 2015). In consequence of the neuro-science studies which became popular based on the needs of time, inside of the human brain is scanned, thoughts and feelings may be analyzed and interpreted. These studies allowed us to see that the intelligence, feelings of a man is the center of direct and indirect learning. Thus, the first target of learning, training and teaching should be examining, knowing and understanding the brain (Duman, 2015; Farmer-Dougan and Alferink, 2013).

The only organ in the human body which does not fully develop until birth is brain because the functional aspects of brain start to develop after birth (Kearns, 2017; Lally, 1998; Rowley and Williams, 2015). Early childhood is considered as the period when the development of brain shaped with heredity and the mutual interaction of the environment is at the most intense stage (Baker-Hanningham and Lopez Boo, 2010; Best Start Resource Centre, 2011; Boivin and Hertzman, 2012; Semrud-Clikeman and Ellison, 2009). Experiences offered during this period facilitates the shaping of child's brain structure and his/her adaptation to the

changing conditions throughout his/her life (National Scientific Council on the Developing Child, 2006; Semrud-Clikeman and Ellison, 2009; Stack, 2013).

Children in early childhood, which is a critical period for brain development, need activities that will allow them to receive and experience different stimuli as much as possible systematically within a certain program. It is very important to configure and prepare activities of different types with great care in order to ensure an effective learning. This brings forward the question of which content of education programs and activities for children in pre-school period support brain development. Turhan and Özbay (2016) focus on supporting cognitive processes in this period, while Bergen (2018) focuses on supporting cognitive and language development fields.

It can be seen that education programs which especially support cognitive development field the most are thinking education programs. In a book about thinking written by Moseley, Baumfield, Elliot, Gregson, Higgins, Miller and Newton (2005) it can be seen that thinking education programs focus more on the cognitive field. It is assumed that thinking education programs would be appropriate to meet the need for human sources with questioning, interrogation and thinking abilities who are needed the most in the age of science and technology. At this point, we face the question about which thinking education programs will meet these needs in the best way and support brain development in the best way.

In general, it is necessary to utilize philosophical questioning method to fulfill the need of children, especially the children at pre-school age, to ask questions and these philosophical training programs should be provided to the children at this age. Therefore, when the educational programs targeting the needs of the time and the cognitive development area in a manner to support the brain development are considered, it is thought that philosophical training programs would be effective. Thus, the purpose of this study it to review the impact of the philosophical training program on the children as a stimuli for brain development at pre-school age.

BRAIN DEVELOPMENT IN PRE-SCHOOL PERIOD

In brain, numbered dendrite collecting information from other cells and trillions of synapsis with the combination of axones sending information to other neurons are being regulated. In the first 3 years of a child, it is considered that approximately 1000 trillion synapsis are being established through experiences (Bell and Fox, 1997; Schiller, 2010). Bonnier (2009) and Kearns (2017) suggest that brain develops at a maximum level during the first 3 years of life, and that the central nervous system is quite flexible, moldable and sensitive towards the stimuli before the age of 6 years. In Figure 1, synapsis in the brain at birth, at the age of 6 and at the advancing ages are given respectively.

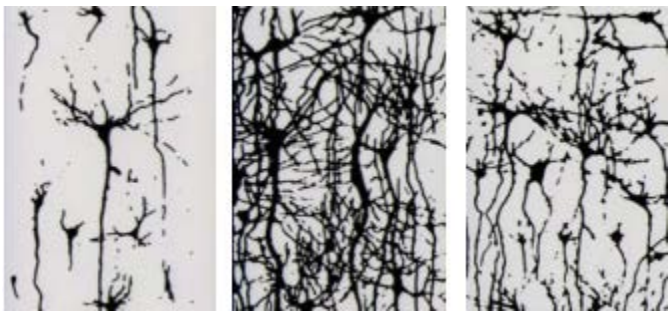

FIGURE 1. *Status of synapsis at birth, 6 years and 14 years*
(Source: Australian Early Development Census, 2019).

As it is seen in Figure 1, synapsis which are a few at birth reaches the maximum level at the age of 6 years and decreases again at the age of 14 years. During puberty, the number of

synapsis in the brain decreases up to 500 trillion. Starting from this, it is possible to say that early childhood is a critical period in terms of synapsis.

Neural connections between the cells in brain are shaped and vary based on the conditions faced by people, and have an importance in a person's life in terms of functionality. Because, these connections allow neurophysical and neurochemical adaptation to environmental changes, new experiences and damages. This ability of brain cells which allow them to adapt the world outside is called neuroplasticity (flexibility of brain cells) (Baker-Hanningham and Lopez Boo, 2010; Schiller, 2010).

Lally (1998) and Turhan and Özbay (2016) mention that the educational content prepared by taking neuroplasticity into consideration would contribute to rather flexible neural network in children at early ages. Because, it is thought that the foundations of neural network formation are associated with the experiences and repetitions (Save the Children, 2018). Besides, children receiving such training are assumed to accommodate themselves against the challenges they face all through their lives (Semrud-Clikeman and Ellison, 2009). Therefore, Turhan and Özbay (2016) state that early childhood specialist need to be aware of neuroplasticity concept and process, and to organize the development and training programs at this period in a manner to stimulate neuroplasticity in theory and practice.

SIGNIFICANCE OF STIMULI IN BRAIN DEVELOPMENT

The foundations of sensory and perceptive systems are critical to language, social behavior and feeling shaped in early years (Tierney and Nelson, 2009). Therefore, children should be provided with rich, natural and repetitive stimuli and environmental conditions during this period. By this way, the learning of children is faster and more permanent (Jensen, 2001; Shonkoff and Philips, 2000; Turhan and Özbay, 2016). So, educational environments for children consisting of different and substantial experiences are very important. Save the Children (2018) and Schiller (2010) also state that the experiences offered to children at this age increase the synaptic connections and repeating the experiences strengthen the connections. For example, if a child reacting the singing of his/her caregiver with joy, when he/she has more song experiences his/her language development substantially affected by this and the relevant brain processes are affected positively from this (Tierney and Nelson, 2009). Besides, critical periods and things to do for the development of each part of the brain which is responsible for different cognitive functions may vary. For example, the critical time interval for limbic system responsible for emotions and memory is the period from birth to third year. The most important stimuli affecting limbic system are social interactions and emotional support (Kearns, 2017). Educational programs built and enriched or each part of the brain by educators who know the functions of the brain would provide significant support to the sophisticated development of children.

When it is considered that the brain development of children should be supported with pre-school education, the extent of support for the development of brain provided by Pre-School Education Program implemented by Ministry of National Education in Turkey is important. In the study conducted by Aydın, Madi, Alpanda and Sazcı (2012) where they assessed the Pre-School Training Program of Ministry of National Education [MNE] (2006), they studied the parts of brain affected by the outcomes of each development area. When all development areas based on the results of the study are considered, it was observed that there was more focus on the activation of prefrontal and parieto-occipito-temporal area (POT). While the prefrontal area combines all internal and external stimuli and decides on the behavior to be exhibited, POT area ensures the interpretation of what is read, heard, felt or thoughts and sentences. It is seen that these two parts of brain stand out in all other development areas except for psychomotor development area. While cortex, cerebellum and parietal area are effective in psychomotor development outcomes, it was determined that socio-emotional development additionally covers the limbic system. As a recommendation, it was stated that program should be organized in compliance with anatomic-physiological structure of brain.

RELATIONSHIP BETWEEN BRAIN DEVELOPMENT AND THINKING SKILLS

In the pre-school period which is deemed as a critical period for brain development, other development areas are directly affected with the brain development. It is observed that brain development has a quite significant impact on other development areas as well as cognitive and language development areas (Lally, 1998; Turhan and Özbay, 2016). Because neurological connections constitute a basis not only for skills such as thinking or questioning, but also physical movement, social and emotional behaviors (Schiller, 2010). Besides, experiences in early childhood have a tremendous effect on the formation of synaptic networks (Save the Children, 2018). During the pre-school period constituting the majority of the learning, use of different education programs as stimulus to early brain development and use of different strategies, methods and techniques to increase the impact level of these programs would provide important opportunities for the children to maximize the capacity they have.

For the individuals to cope with challenging and stressful situations, they need to have high flexible adaptation capacity and to establish new neural connections in such situations. For this purpose, it is recommended to provide children with an education targeting problem solving and living skills in terms of neuroplasticity at early ages. Therefore, the necessity to perform studies and activities for increasing the cognitive operations which is at the basis of all living skills stands out (Turhan and Özbay, 2016). Bergen (2018) also mentions that the brain development of pre-school children is especially associated with the development of language and cognitive area. Basically, when the programs targeting the cognitive area are considered, it is seen that they are thinking education programs. Moseley et al. (2015) determined in their book "Frameworks for Thinking: A Handbook for Teaching and Learning" that all thinking education programs target the cognitive area. However, it is a non-negligible fact that the development of cognitive area moves in a dynamic structure with other development areas. In other words, language area, motor area, socio-emotional area and self-care skills provide important support to cognitive development and these areas are significantly influenced by cognitive development. Because there is a mutual dynamic interaction between development areas.

When the significance of thinking skills are considered, these skills are seem to be among the skills not only required for professional and educational life, but also for the skills within the context of family, friendship and society. Besides, thinking skills are important in the structuring of personality and sharing belief and values (Moseley et al., 2005). As a result the information age, need for creative and critical thinking skills increased (Duman, 2015) and independence and flexibility became more important. In other words, skills related to reaching reliable information, criticizing and assessing ideas, initiating creative thinking and discussion became more important than expressing ideas independently and sufficiently (Moseley et al., 2005). Thus, educational programs and materials developing thinking skills are needed to grow a generation which is able to think.

PHILOSOPHY EDUCATION AS A THINKING EDUCATION PROGRAM

Philosophers had made lots of statements regarding the importance of asking questions and questioning since the ancient times, and they left important works to us. To indicate that life is shaped by questioning, Socrates said "An unquestioned life does not worth living"; Descartes stated "Living without philosophy is like living eyes shut without trying to open them"; Confucius said "Unless a man suggests an about what he could think of a matter or what could he think for that, then I don't have anything to tell him." Besides, it is possible to understand that even our own truth are open to questioning and they are not certain by Russell's sentence of "I don't risk death for my thoughts because I may be wrong."

When we think that Socrates, Descartes, Confucius and many more people are emphasizing the important of questioning and thinking abilities, it is inevitable for philosophy

to gain importance also in the field of education. John Dewey, who is one of the people shining out regarding his thoughts on education and learning of children, also said, "Education is a lab in which philosophical views are tried and embodied." Polat (2011) also says that philosophy is inside the life, it is even the life itself. Therefore, it is considered very important for the educators to not be afraid of philosophy and word on how to use philosophy in education.

"Philosophy" is thought to be an integral part of education to raise people with advanced thinking and questioning abilities who can make a difference and are good people playing an active part in protection of social order.

Qualifications of the required human resources to protect social order should be determined correctly. According to Plato's philosophy there are two main concepts in evaluating human resources. First of them is the biggest virtue being knowledge. Virtue concept, on the other hand, is usually used in a meaning of displaying moral and intellectual goodness. Truth which needs to be objective and consistent and decisions need to be taken in the society are reached through knowledge. Besides, knowledge plays an important role in guiding people and educating them. Second concept is for the people to have different abilities. According to Plato each person has different capacities to reach correct information. In other words, people are different in terms of their intelligences and potentials (Schmandt reporting from Nurdin, 2017).

Aristotle distinguishes people from animals due to their abilities to think and explain their thoughts by speaking (Birand, 1964). In this perspective, people, as living beings in the society who can think, need to evaluate problems in the field or fields they are inclined to in terms of knowledge and abilities with a critical approach and put forward solution suggestions. For example, Plato expressed that for a democratic society there is need for people who can think independently and critically in his "Republic" book (Platon, 2006). When we look at the rankings of Turkey among other countries according to the results of PISA test organized by ECD, it is obvious that we should leave the rote-learning system and adapt a more critical, innovative system supporting multi-dimensional thinking (Erdoğan, 2018).

Oscar Brenifier, who is known for his philosophy books for children, also made some important determinations after his visits to our country. Brenifier defined the education system of Turkey as, "It is continuing to be the victim of traditional education system like many other countries. The education model in which teacher apply only the curriculum and students only listen and repeat what is told to them." (P4C Türkiye, t.y.). Brenifier's words once again revealed the importance of children in our country to gain a philosophical view. Socrates mentioned that children should not be passive thousands of years ago. Tanveer (2005) also stated that children should always ask questions in order to find the truth and their teachers should answer these questions with great happiness.

It is very though-provoking that Socratic questioning method, which was told thousands of years ago and proven to be very important in centuries, still not being sufficiently applied in education system. And the most important problem is even though thinking and questioning abilities are present as goals, targets, achievements or indications in education programs of every level in our education system, these cannot be sufficiently applied.

PHILOSOPHY EDUCATION WITH CHILDREN IN PRE-SCHOOL PERIOD

Philosophy education in pre-school period is very important for children to be able to learn free thinking, be themselves without being their thoughts stereotyped due to negative environmental effects, and to be able to develop a life philosophy built upon curiosity, thinking, research and questioning grounds. Accordingly, explanations regarding why philosophy education should be given in the pre-school period and domestic and international studies carried out related to the subject were given as summaries under this topic.

Philosophical questioning; is much more than thinking abilities (Creative Innovative Supportive, 2011). Just as the laws of nature are embedded in the nature, philosophical relevancies are embedded in the human existence (Taşdelen, 2017). As a result of the questions asked by children and the desire to know and make sense lying under these, philosophy

approach with children showed up (Erdoğan, 2018). Wartenberg (2009) had also noticed that children at tender ages can philosophize, too, upon the question of "How did the first human was created?" asked by his child.

Philosophy with children is a thinking education based on discovery over experiences, events, facts. Philosophizing with children is not just giving information related to the history of philosophy as in adults. On the contrary, it is going back to the source of philosophy. You should philosophize with children by starting from the life itself through various stimulants. You should philosophize without getting too deep in philosophy, without sailing into abstract expressions, based on tangible examples and life experiences and at a level suitable for perception and cognitive of the child (Taşdelen, 2017).

Philosophy educations are considered to have meaningful effects on children. When we look at the results of some studies performed with school-age children we can see that philosophy education has positive effects in intellectual, social-emotional and many more fields (Creative Innovative Supportive, 2011). For example; Yan, Walters, Wang and Wang (2018) performed a meta-analysis of 10 studies looking into the effects of Philosophy for Children education which was applied to students starting from elementary-school to high-school between years 2002-2016 on children. According to the results of the meta-analysis performed it was determined that cognitive learning benefits and questioning abilities of children were increased. In the study of Topping and Trickey (2007), it was observed that philosophical questioning training given in primary school had long-term effects on cognitive skills.

Before, philosophy classes were given to only school-age children (Erdoğan, 2018). However, Polat (2011) expresses that children can start to both elementary school and life one step ahead with the philosophy education given in pre-school period. According to the studies performed, children showed great interest in philosophy educations given in pre-school period. These educations were observed to support children not only in cognitive field but also social and affective fields. Moreover, children were determined to express themselves more comfortable and precise and make better logical inferences after educations (Erdoğan, 2018).

Thomas E. Jackson also says that philosophy educations programs should start from kindergartens, not elementary schools (Çıldır, 2002). In the 80s Jackson shaped the Lipman's Philosophy for Children (P4C) Model and said that the model will have the following positive outcomes on pre-school period children. For example, self-confidences and communication skills of children taking this model increase, they can criticize on their own, they are open to different solutions and suggestions and accept other views, they show tolerance and respect to other people (Karakaya reporting from Daurer, 2006).

When we look at the studies on effects of philosophy education programs on children applied to 0-7 age group we understand the importance and reason of philosophy education in pre-school period more clearly. Domestic and international studies performed on this subject and abilities effected positively are given below:

- Okur (2008) formed a group in which activities such as drama and story-telling were given and a group in which philosophy education was given to study the effect on assertiveness, cooperation and self-control in six-year old children. Children in the group with activities such as drama and story-telling were observed to have only self-control abilities increased and children in the group with philosophy education were observed to have social abilities such as assertiveness, cooperation and self-control increased.
- In the study performed by Gimonoz-Dasi, Quintanilla and Daniel (2013) on 4-5 year age group pre-school children's emotional understanding and social abilities; while the program was observed to be effective in terms of social abilities on 4-year group it was observed to be effective in terms of both emotional understanding and social abilities on 5-year old group.
- In the study performed by Ghaedi, Fomani and Mahdian (2014) on 5-6 year age group about effects of Philosophy for Children education program on pre-school children's innovative thinking abilities; it was seen that the program was effective on innovation abilities of children.

- When we look at the effects of Philosophy for Children education program applied on 5-6 year age group pre-school children by Sare, Luik and Tulviste (2016) on questioning abilities of children it was determined that the children's comparison, analogy, realization abilities, due to expressions and causative connections are better than the children outside the program.
- When we look at the short-term effects of the Question Quadrant education program developed by Cam (2006) and applied by Cullen (2016) on 6-7 year age group children in elementary school period; it is determined to be effective on critical, innovative, attentive and cooperative thinking of the children.
- Taş (2017) formed two groups; in one group Philosophy for Children program was applied to examine its effect on 4-6 year age group children's theory of mind and innovation and the other group was applied no education but kindergarten education. In the group receiving Philosophy for Children education determined to have significantly higher total and sub test grades on theory of mind compared both to the other group and their previous grades without the education.
- In a study performed by Siddiqui, Gorard and See (2017) on 4-5 year age group children in elementary school period to see non-cognitive results of the Philosophy for Children program it was observed to improve communication abilities, group working, endurance and empathy abilities of those children in their self-evaluations. Teacher's reports also showed that they had a higher self-confidence in asking questions and justification, their attitudes changed in a positive way, and their social and communication abilities, cooperation, endurance and group working abilities also improved.
- It was seen that the Philosophy for Children education program applied by Karadağ and Demirtaş (2018) on 5-6 year age group children's critical thinking abilities, and that the children and teachers participating in the study had positive thoughts about the program.

Pre-school period philosophy education was observed to have positive effects on children in studies performed. Therefore, it is thought to be necessary for the philosophy education to be given to the pre-school period children. Polat (2011) also states that philosophy education should be given within all the activities in this period in a conscious and planned way for the children to be raised as individuals with philosophic thinking. Philosophy education is thought to establish both individual and social peace. Our age's human resources requirement can be met by raising ethical, virtuous, knowing and able-minded people. Besides, children coming from different regions and having different equipment will be given the knowledge and abilities required to maximize their potentials.

Results obtained from studies performed in the fields of brain and learning also shows how critical early childhood years are. Way to raise happy, tolerant and nice people also passes through philosophy. Philosophy is considered indispensable in pre-school period in order to form a happy society in which children can be themselves without trying to make them like anyone else.

PHILOSOPHY EDUCATION WORKS AND BOOKS FOR CHILDREN IN TURKEY

When you look at the philosophy education for children in Turkey you can see that these are mostly for school age children. In these educations are generally based on Philosophy for Children (P4C) Approach developed by Matthew Lipman (Okur, 2008; Taş, 2017). Educations, on the other hand, are carried on for both children and educators.

Obtaining important gains on children is aimed with the Philosophy for Children (P4C) Approach. For example, thinking abilities of children such as critical, innovative, together, cooperative, and their abilities of using the language effectively and expressing themselves improve, their self-confidences and awareness increase. Children are able to look from a different perspective, avoid generalization, know and classify concepts, identify logic mistakes by reasoning and establishing cause and effect relationship. They are able to question moral and social values and express their thoughts on discussions by understanding themselves and the

universe. The most important thing with this model is that with it, competences which children already possess in their potentials such as curiosity and asking questions improve (P4C Turkey, t.y.).

Educations of the Philosophy for Children (P4C) Approach for educators are being carried on in Turkey. It is observed that these educations are given mainly by universities and also by private institutions. Within the content of the education there are subjects such as getting the participants know philosophy and how can they present experiences enriched in terms of philosophy to their students (Boğaziçi Üniversitesi Yaşamboyu Eğitim Merkezi, t.y.).

There are also educations other than the Philosophy for Children (P4C) Approach available. Educations given with picture books for children in the "Küçük Filozoflar Series" written by Oscar Brenifier with the purpose of improving thinking abilities of children can be given examples to these. Still, this education is also given to the school age children. Through education, children are learning the main points of directing meaningful questions related to discussion, making public speeches, sharing their thoughts, and using their logics when dealing with problems (Tudem Yayın Grubu, t.y.a).

Many books are written to be guides for children when making philosophy. When you look at these books, you can see that many of these are written for school age children. You can find books for pre-school period children related to philosophy education:

- **"Küçük Filozof" Series:** Written by Oscar Brenifier for 3 years and older children. It comprises of 4 books. Books, contribute to questions occupying children's minds and directing their view of life, and their thinking abilities (Tudem Yayın Grubu, t.y.b).
- **"Pikolo ile Felsefe Öğreniyorum" Set:** Written by Michael Piquemal and Thomas Baas (2017) for 5 years and older children. It comprises of 9 books. It is written with the purpose of giving information on subjects such as how can the children deal with the problems they face in daily life, how can they make inferences, what can parents do for their children in similar situations (ODTÜ Yayıncılık, t.y.).

DISCUSSION and RESULT

Brain development studies which play a major role for the skills required in the information age became important not only in the field of neuroscience but also almost in every field. Such that, many researches revealed that brain development is in direct interaction with all other areas of development. In these studies, it was determined that brain development constitute a basis from skills such as thinking and questioning as well as physical movement, social and emotional behaviors (Bergen, 2018; Kearns, 2007; Lally, 1998; Tierney and Nelson, 2009; Turhan and Özbay, 2016). Considering that these skills are required in every aspect of life, it is understood that brain development should be accomplished at maximum level.

It is known that the expansion of synapsis area at the points where dendrites and axones in the nervous system combine directly affect the brain development. It is thought that the period of live when neuroplasticity which refers to the flexibility of brain cells and the expansion of synapsis area are very intense is the pre-school period, especially 0-3 years. Based on this, it is important to provide the children at pre-school age with life experiences and educational contents that would positively affect the brain plasticity.

When it is considered that the educational content to support the neuroplasticity of pre-school children should especially be intended to increase cognitive functions, educational programs which are prepared based on the cognitive development area and which increase the strength of thinking stand out. Although there are numerous thinking training programs, philosophy training program is quite important in terms of completely teaching children the skills to be used life-long. Besides, it is thought that thinking skills may be gained through philosophical discussions for teaching asking and questioning. Because, children explore finding answers to their own questions through philosophical discussions and they find the answers to their questions themselves. When it is taken from this point, it is considered that children need to gain such skills starting from the early ages.

Although philosophy studies with children have been conducted for years, when the literature is reviewed it is seen that these studies were rather conducted with children at school age (Akkocaoğlu Çayır and Akkoyunlu, 2015). In fact, researches show that philosophy trainings during pre-school period are more effective on children's social skills such as comprehension of emotions, self-control, communication and group word, creativity skills, thinking skills and on the skills in different areas. When considered from this aspect, it is deemed necessary to include the philosophy training affecting the brain plasticity of pre-school children favorably. Besides, it is necessary to conduct more studies for the planning and implementation of philosophical training programs suitable for children at this age, and for reviewing its results. Educators, academicians and law-makers have a great responsibility regarding this matter. It is important that the materials to be used to fit the children. However, when the literature is reviewed, we couldn't find sufficient numbers of materials which may be references to the philosophical discussions of pre-school children. Cam (1993) and Wilks (1995) consider children's literature as a substantial source for philosophical themes ensuring the development of questioning skills. Therefore, it is recommended to write texts, stories and pictured children's books which would contribute to the philosophical discussions of the children.

The philosophical education to be provided at pre-school age would allow the children to start primary school with equal opportunities in terms of development. When the philosophers and scientists making a difference in the world, their casts of mind significantly differ from the others. It is crucial to free thinking to allow thinking in another way. It is considered that the way to grow generations which will make difference in the future passes through the philosophical thinking skills of an individual. Because, all and only the thinking generations may make a difference and append a signature on change and transformation. This may be achieved by philosophy. For this reason, philosophy education is considered to be crucial in the pre-school period which covers the most of the years when the synaptic network is established very rapidly. This may only be succeeded with the families and educators who love philosophy, who read, question and do researches as well as the programs and training materials. It should be noted that if a parent or the educator does not have the philosophical thinking skill, then despite the efforts made young children has very low chance to gain. It is very difficult for those who don't have free thoughts to build environments to allow freeing the thoughts of children. Therefore, during the early childhood period consisting of the most critical years in a person's life, definitely including philosophy education to all activities in a conscious and planned manner would be very beneficial. Besides, it is considered that is very important to provide in-service training to the educators and parents in order to grow future generations making a difference.

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